ADJOA SMALLS-MANTEY

NIH-Oxford Scholar 2007

Degree: University of Maryland, Baltimore County, B.S. Biochemistry, 2007

Research Area: Immunology; HIV/AIDS

Adjoa Smalls-Mantey graduated received her B.S. with honors in Biochemistry, graduating *summa cum laude* from the University of Maryland, Baltimore County in 2007. At UMBC she was awarded the Barry M. Goldwater Scholarship and inducted into Phi Beta Kappa Society; she was also a UMBC Meyerhoff Scholar, a Howard Hughes Medical Institute Scholar, a MARC Scholar, as well as a member of the UMBC Honors College and Golden Key International Honor Society. Adjoa's excitement for biomedical research began in her final year of high school, when she worked with Dr. William Winter at Howard University School of Medicine to investigate pathways that regulate 2,3-diphosphoglycerate levels in red blood cells, research applicable to patients with sickle cell anemia. Throughout all 4 years of college Adjoa studied RNA packaging in Moloney Murine Leukemia Virus with Dr. Michael Summers, leading to a paper that she co-authored in the journal *Biochemistry*. Also, in the summer of 2005 Adjoa participated in the Cornell/Rockefeller/Sloan Kettering Gateways to the Laboratory Program, where she worked with Dr. Nikola Pavletich on solving the crystal structure of the *S. cerevisiae* Rad4-Rad23 complex bound to a DNA substrate. At the conclusion of the program, she was awarded the Abby Mauzé Rockefeller Charitable Trust Award. In the summer of 2006, Adjoa worked in the lab of Nobel laureate Dr. Thomas Cech at the University of Colorado at Boulder, studying how telomerase is assembled from RNA and protein components. In addition to her extensive research and academic pursuits, she demonstrated her leadership capacity by founding and serving as president of UMBC's Fellowship Under God's Influence, an on-campus Christian ministry and Deputy Director of the Metrolite Pathfinder Club, her church's local chapter of an international scouting organization. Adjoa has completed her first year of medical school at Columbia's College of Physicians and Surgeons as a member of their Medical Scientist Training Program. She was a mentor in the CHAMPS Afterschool program at the Health Opportunities HS, organized and participated in many events on campus, and is serving as secretary of the Black and Latino Student Organization and Tutoring Coordinator for the Student Succes Network. This summer she is conducting research with Dr. Mark Connors of the NIH. They are investigating B cells that produce broadly cross-reactive neutralizing antibodies to HIV with the goal of cloning these cells for research and therapeutic treatments.